

**IN THE CLAIMS:**

1. (Currently Amended) A recursive motion vector estimation method, comprising the steps of:

a) for a current block of a picture divided into a plurality of blocks, and based on motion information generated for the previously-processed block if any and if immediately to the left of said current block, the blocks being processed by said method in a predetermined order, generating (E) a plurality of candidate vectors from stored vectors (PV);

b) selecting (E) one of these candidate vectors to generate a selected vector ( $d^1$ );

c) generating (REF) a plurality of test vectors from the selected vector ( $d^1$ );

d) selecting (REF) one of the test vectors to generate an output vector ( $d^2$ ); [and]

e) storing (MEM) the output vector ( $d^2$ ); and

f) re-executing steps a) through f) for a next-to-be-processed block, if any, as said current block.

2. (Currently Amended) A recursive motion vector estimation method, comprising the steps of:

generating (E) a plurality of candidate vectors from stored vectors (PV);

selecting (E) one of these candidate vectors to generate a selected vector ( $d^1$ );

generating (REF) a plurality of test vectors from the selected vector ( $d^1$ );

selecting (REF) one of the test vectors to generate an output vector ( $d^2$ ); and

storing (MEM) the output vector ( $d^2$ )[A method as claimed in claim 1], wherein said step of generating a plurality of test vectors from the selected vector ( $d^1$ ) includes the step of adding -1, 0, or +1 to each component of the selected vector ( $d^1$ ).

3. (Currently Amended) A device for recursive motion vector estimation, the device comprising:

a) for a current block of a picture divided into a plurality of blocks, and based on motion information generated for the previously-processed block if any and if immediately to the left of said current block, the blocks being processed by said method in a predetermined order, means (E) for generating a plurality of candidate vectors from stored vectors;

b) means (E) for selecting one of these candidate vectors to generate a selected vector (d<sup>1</sup>);

c) means (REF) for generating a plurality of test vectors from the selected vector (d<sup>1</sup>);

d) means (REF) for selecting one of the test vectors to generate an output vector (d<sup>2</sup>); [and]

e) means (MEM) for storing the output vector (d<sup>2</sup>); and

f) means for re-executing steps a) through f) for a next-to-be-processed block, if any, as said current block.